

Substitute form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/758,871
		Filing Date	January 16, 2004
		First Named Inventor	Sheppard et al.
		Group Art Unit	2845-2812
		Examiner Name	Richards, N. Drew Geyer, S.
Sheet 1 of 3	Attorney Docket Number	5308-291	

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
SBG	1.	US-6,150,680		Eastman et al.	11-21-2000
SBG	2.	US-6,086,673		Molnar	07-11-2000
SBG	3.	US-5,686,737		Allen	11-11-1997
SBG	4.	US-4,755,867		Cheng	07-05-1988
SBG	5.	US-2004/0241970	A1	Ring	12-02-2004
SBG	6.	US-2003/0123829	A1	Taylor	07-03-2003
SBG	7.	US-2002/0167023	A1	Charvarkar et al.	11-14-2002
SBG	8.	US-2002/0008241	A1	Edmond et al.	01-24-2002

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Kind Code (if known)			
SBG	9.	EP	0 334 006	A1	Siemens AG	09-27-1989	
SBG	10.	JP	2004-342810		Fujitsu Ltd.	12-02-2004	Abstract
SBG	11.	JP	11261053		Furukawa Electric Co. Ltd.	09-24-1999	Abstract
SBG	12.	PCT	WO 04/008495		Cree, Inc.	01-22-2004	

OTHER NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
SBG	13.	Ando et al., "10-W/mm AlGaIn-GaN HFET With a Field Modulating Plate," <i>IEEE Electron Device Letters</i> , 24(5), pp. 289-291 (May 2003).	
SBG	14.	Chang et al., "AlGaIn/GaN Modulation-Doped Field-Effect Transistors with an Mg-doped Carrier Confinement Layer," <i>Jpn. J. Appl. Phys.</i> , 42:3316-3319 (2003).	
SBG	15.	Chini et al., "Power and Linearity Characteristics of Field-Plagted Recessed-Gate AlGaIn-GaN HEMTs," <i>IEEE Electron Device Letters</i> , 25(5), pp. 229-231 (May 2004).	
SBG	16.	Cho et al., "A New GaAs Field Effect Transistor (FET) with Dipole Barrier (DIB)," <i>Jpn. J. Appl. Phys.</i> 33:775-778 (1994).	
SBG	17.	Coffie et al., "Unpassivated p-GaN/AlGaIn/GaN HEMTs with 7.1 W/MMF at 10 GHz," <i>Electronic Letters online No. 20030872</i> , 39(19), (September 18, 2003).	
SBG	18.	Gaska et al., "Self-Heating in High-Power AlGaIn/GaN HFETs," <i>IEEE Electron Device Letters</i> , 19(3), pp. 89-91 (March 1998).	
SBG	19.	Hikita et al., "350V/150A AlGaIn/GaN Power HFET on Silicon Substrate With Source-via Grouding (SVG) Structure," <i>Electron Devices Meeting, 2004</i> , pp. 803-806, IEDM Technical Digest. IEEE International (Dec. 2004).	

Examiner Signature	<i>SBG</i>	Date Considered	12-8-05
--------------------	------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO			Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Application Number	10/758,871
			Filing Date	January 16, 2004
			First Named Inventor	Sheppard et al.
			Group Art Unit	2815 2812
			Examiner Name	Richards, N. Drew GEYER, S.
(use as many sheets as necessary)			Attorney Docket Number	5308-291
Sheet	2	of	3	

OTHER NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
SBG	20.	Kanaev et al., "Femtosecond and Ultraviolet Laser Irradiation of Graphitelike Hexagonal Boron Nitride," <i>Journal of Applied Physics</i> , 96(8), pp. 4483-4489 (Oct. 15, 2004).	
SBG	21.	Kanamura et al., "A 100-W High-Gain AlGaIn/GaN HEMT Power Amplifier on a Conductive N-SiC Substrate for Wireless Base Station Applications," <i>Electron Devices Meeting, 2004</i> , pp. 799-802, IEDM Technical Digest. IEEE International (Dec. 2004).	
SBG	22.	Karmalkar et al., "Very High Voltage AlGaIn/GaN High Electron Mobility Transistors Using a Field Plate Deposited on a Stepped Insulator," <i>Solid State Electronics</i> , Vol. 45, pp. 1645-52 (2001).	
SBG	23.	Kashahara et al., "Ka-band 2.3W Power AlGaIn/GaN Heterojunction FET," <i>IEDM Technical Digest</i> , pp. 677-680 (2002).	
SBG	24.	Komiak et al., "Fully Monolithic 4 Watt High Efficiency Ka-band Power Amplifier," <i>IEEE MTT-S International Microwave Symposium Digest</i> , Vol. 3, pp. 947-950 (1999).	
SBG	25.	Kusters et al., "Double-Heterojunction Lattice-Matched and Pseudomorphic InGaAs HEMT with δ -Doped InP Supply Layers and p-InP Barrier Enhancement Layer Grown by LP-MOVPE," <i>IEEE Electron Device Letters</i> , 14(1), (January 1993).	
SBG	26.	Manfra et al., "Electron Mobility Exceeding 160 000 cm ² /V s in AlGaIn/GaN Heterostructures Grown by Molecular-beam Epitaxy," <i>Applied Physics Letters</i> , 85(22), pp. 5394-96 (Nov. 29, 2004).	
SBG	27.	Manfra et al., "High Mobility AlGaIn/GaN Heterostructures Grown by Plasma-assisted Molecular beam epitaxy on Semi-Insulating GaN Templates Prepared by Hydride Vapor Phase Epitaxy," <i>Journal of Applied Physics</i> , 92(1), pp. 338-345 (July 1, 2002).	
SBG	28.	Manfra et al., "High-Mobility AlGaIn/GaN Heterostructures Grown by Molecular-beam Epitaxy on GaN Templates Prepared by Hydride Vapor Phase Epitaxy," <i>Applied Physics Letters</i> , 77(18), pp. 2888-2890 (Oct. 30, 2000).	
SBG	29.	Parikh et al., "Development of Gallium Nitride Epitaxy and Associated Material-Device Correlation for RF, Microwave and MM-wave Applications," Cree, Inc. (35 slides).	
SBG	30.	Saxler et al., "III-Nitride Heterostructures on High-Purity Semi-Insulating 4H-SiC Substrates for High-Power RF Transistors," <i>International Workshop on Nitride Semiconductors</i> (July 19, 2004).	
SBG	31.	Shiojima et al., "Improved Carrier Confinement by a Buried p-Layer in the AlGaIn/GaN HEMT Structure," <i>IEICE Trans. Electron.</i> , E83-C(12), (December 2000).	
SBG	32.	"Thick AlN template on SiC substrate - Novel semi insulating substrate for GaN-based devices," © 2003 by TDI, Inc., http://www.tdi.com/products/AlN_SiC.html .	
SBG	33.	Tilak et al., "Influence of Barrier Thickness on the High-Power Performance of AlGaIn/GaN HEMTs," <i>IEEE Electron Device Letters</i> , 22(11), pp. 504-506 (Nov. 2001).	
SBG	34.	United States Patent Application entitled "Improved Dielectric Passivation for Semiconductor Devices," Serial No. 10/851,507, filed May 22, 2004 (Cree Docket No. P0274).	
SBG	35.	United States Patent Application entitled "Silicon Carbide on Diamond Substrates and Related Devices and Methods," Serial No. 10/707,898, filed January 22, 2004 (Cree Docket No. P0387).	
SBG	36.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," Serial No. 10/897,726, filed July 23, 2004 (Attorney Docket No. 5308-392).	
SBG	37.	United States Patent Application entitled "High Power Density and/or Linearity Transistors," Serial No. 11/005,107, filed December 6, 2004 (Attorney Docket No. 5308-511).	
SBG	38.	United States Patent Application entitled "Field Effect Transistors (FETS) Having Multi-Watt Output Power at Millimeter-Wave Frequencies," Serial No. 11/005,423, filed December 6, 2004 (Attorney Docket No. 5308-512).	
SBG	39.	United States Patent Application entitled "Group III Nitride Field Effect Transistors (FETs) Capable of Withstanding High Temperature Reverse Bias Test Conditions," Serial No. 11/080,905, filed March 15, 2005 (Attorney Docket No. 5308-516).	
SBG	40.	United States Patent Application entitled "Aluminum Free Group III-Nitride Based High Electron Mobility Transistors and Methods of Fabricating Same," Serial No. 11/118,575, filed April 29, 2005 (Attorney Docket No. 5308-543).	
SBG	41.	United States Patent Application entitled "Binary Group III-Nitride Based High Electron Mobility Transistors and Methods of Fabricating Same," Serial No. 11/118,675, filed April 29, 2005 (Attorney Docket No. 5308-544).	

Examiner Signature	<i>K. G. [Signature]</i>	Date Considered	12-8-05
--------------------	--------------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/758,871
		Filing Date	January 16, 2004
		First Named Inventor	Sheppard et al.
		Group Art Unit	2815 2812
		Examiner Name	Richards, N. Drew Geyer, J.
Sheet 3 of 3	Attorney Docket Number	5308-291	

OTHER NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
SBG	42.	United States Patent Application entitled "Composite Substrates of Conductive And Insulating or Semi-Insulating Group III-Nitrides For Group III-Nitride Devices," Serial No. 11/103,127, filed April 11, 2005 (Attorney Docket No. 5308-551).	
SBG	43.	United States Patent Application entitled "Thick Semi-Insulating or Insulating Epitaxial Gallium Nitride Layers and Devices Incorporating Same," Serial No. 11/103,117, filed April 11, 2005 (Attorney Docket No. 5308-553).	
SBG	44.	United States Patent Application entitled "Cap Layers and/or Passivation Layers for Nitride-Based Transistors, Transistor Structures and Methods of Fabricating Same," Serial No. 10/996,249, filed November 23, 2004 (Attorney Docket No. 5308-373).	
SBG	45.	Walker, J. L. B. (Ed.), <i>High Power GaAs FET Amplifiers</i> , Norwood, MA: Artech House, pp. 119-120 (1993).	
SBG	46.	Wu et al., "3.5-Watt AlGaIn/GaN HEMTs and Amplifiers at 35 GHz," IEDM-2003, Cree, Inc.	
SBG	47.	Wu et al., "3.5-Watt AlGaIn/GaN HEMTs and Amplifiers at 35 GHz," Cree Santa Barbara Technology Center, Goleta, CA 93117.	
SBG	48.	Wu et al., "30-W/mm GaN HEMTs by Field Plate Optimization," <i>IEEE Electron Device Letters</i> , 25(3), pp. 117-119 (March 2004).	
SBG	49.	Wu et al., "Bias-dependent Performance of High-Power AlGaIn/GaN HEMTs," <i>IEDM Technical Digest</i> , p. 378-380 (2001).	
SBG	50.	Wu et al., "Linearity Performance of GaN HEMTs With Field Plates," DRC 2004, Cree, Inc.	
SBG	51.	Wu et al., "Linearity Performance of GaN HEMTs With Field Plates," Cree Santa Barbara Technology Center, Goleta, CA 93117.	
SBG	52.	Yu et al., "Schottky Barrier Engineering in III-V Nitrides via the Piezoelectric Effect," <i>Applied Physics Letters</i> , 73(13), pp. 1880-1882 (Sept. 28, 1998).	
SBG	53.	Zhang et al., "High Breakdown GaN HEMT with Overlapping Gate Structure," <i>IEEE Electron Device Letters</i> , 21(9), pp. 421-423 (September 2000).	

Examiner Signature	<i>NO. 17</i>	Date Considered	12-8-05
--------------------	---------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No. 5308-291		Serial No. 10/758,871	
LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)				Applicant: Sheppard et al.		Filing Date: January 16, 2004	
						GAU-2815-2812	
U.S. PATENT DOCUMENTS							
Examiner Initials	Document No.	Date (m/d/y)	Name	Class	Subclass	Filing Date if Appropriate	
SDG	1.	5,592,501	1/7/97	Edmond et al.	372	45	
FOREIGN PATENT DOCUMENTS							
	Document Number	Date	Country	Class	Subclass	Translation (Yes/No)	
OTHER DOCUMENTS							

Examiner:

Date Considered:

12-8-05

Examiner:

Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet A1

of

A1



Complete if Known

Application Number	10/758.871
Filing Date	January 16, 2004
First Named Inventor	Sheppard
Group Art Unit	2811 2812
Examiner Name	Tom Thomas GEYER, J.
Attorney Docket Number	5308-291

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
/					

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Kind Code (if known)			
/							

OTHER NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
SBG	1.	Ben-Yaacov et al., "AlGaIn/GaN Current Aperture Vertical Electron Transistors with Regrown Channels," <i>Journal of Applied Physics</i> . Vol. 95, No. 4, pp. 2073-2078 (2004).	
SBG	2.	Burm et al. "Ultra-Low Resistive Ohmic Contacts on n-GaN Using Si Implantation," <i>Applied Physics Letters</i> . Vol. 70, No. 4, 464-66 (1997).	
SBG	3.	Heikman, et al., "Mass Transport Regrowth of GaN for Ohmic Contacts to AlGaIn/GaN," <i>Applied Physics Letters</i> . Vol. 78, No. 19, pp. 2876	
SBG	4.	Shen et al., "High-Power Polarization-Engineered GaN/AlGaIn/GaN HEMTs Without Surface Passivation," <i>IEEE Electronics Device Letters</i> . Vol. 25, No. 1, pp. 7-9 (2004).	
SBG	5.	United States Patent Application entitled "Semiconductor Devices Having a Hybrid Channel Layer, Current Aperture Transistors and Methods of Fabricating the Same," Serial No. 10/849,589, filed May 20, 2004 (Attorney Docket No. 5308-412).	
SBG	6.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors Having Regrown Ohmic Contact Regions and Nitride-Based Transistors Having Regrown Ohmic Contact Regions," Serial No. 10/849,617, filed May 20, 2004 (Attorney Docket No. 5308-413).	
SBG	7.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," filed July 23, 2004 (Attorney Docket No. 5308-392).	
SBG	8.	United States Patent Application entitled "Methods of Having Laterally Grown Active Region and Methods of Fabricating Same," filed July 26, 2004 (Attorney Docket No. 5308-374).	
SBG	9.	United States Patent Application entitled "Nitride-Based Transistors and Methods of Fabrication Thereof Using Non-Etched Contact Recesses," Serial No. 10/817,843, filed July 11, 2003 (Attorney Docket No. 5308-248).	
SBG	10.	United States Patent Application entitled, "Silicon Carbide on Diamond Substrates and Related Devices and Methods," (Cree Docket No. P0387).	

Examiner Signature

Date Considered

12-8-05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet A1 of A3

Complete if Known

Application Number	10/758,871
Filing Date	January 16, 2004
First Named Inventor	Sheppard
Group Art Unit	2811 2812
Examiner Name	Tom Thomas Geyer, J.
Attorney Docket Number	5308-291

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
	1.	Re. 34,861		Davis et al.	02-14-1995
SBG	2.	6,639,255		Inoue et al.	10-28-2003
SBG	3.	6,586,781		Wu et al.	07-01-2003
SBG	4.	6,548,333		Smith	04-15-2003
SBG	5.	6,515,316		Wojtowicz et al.	02-04-2003
SBG	6.	6,448,648	B1	Boos	09-10-2002
SBG	7.	6,429,467		Ando	08-06-2002
SBG	8.	6,316,793		Sheppard	11-13-2001
SBG	9.	6,218,680	B1	Carter, Jr. et al.	04-17-2001
SBG	10.	6,177,685	B1	Teraguchi et al.	01-23-2001
SBG	11.	6,064,082		Kawai et al.	05-16-2000
SBG	12.	6,046,464		Schetzina	04-04-2000
SBG	13.	6,028,328		Riechert et al.	02-22-2000
SBG	14.	5,946,547		Kim et al.	08-31-1999
SBG	15.	5,885,860		Weitzel et al.	03-23-1999
SBG	16.	5,705,827		Baba et al.	01-06-1998
SBG	17.	5,701,019		Matsumoto et al.	12-23-1997
SBG	18.	5,523-589		Edmond et al.	06-04-1996
SBG	19.	5,393,993		Edmond et al.	02-28-1995
SBG	20.	5,298,445		Asano	03-29-1994
SBG	21.	5,296,395		Khan et al.	03-22-1994
SBG	22.	5,292,501		Degenhardt et al.	03-08-1994
SBG	23.	5,210,051		Carter, Jr.	05-11-1993
SBG	24.	5,200,022		Kong et al.	04-06-1993
SBG	25.	5,192,987		Khan et al.	03-09-1993
SBG	26.	5,172,197		Nguyen et al.	12-15-1992
SBG	27.	5,053,348		Mishra et al.	10-01-1991
SBG	28.	4,946,547		Palmour et al.	08-07-1990
SBG	29.	4,788,156		Stoneham et al.	11-29-1988
SBG	30.	4,727,403		Hida et al.	02-23-1988
SBG	31.	4,471,366		Delagebeaudeuf et al.	09-11-1984
SBG	32.	4,424,525		Mimura	01-03-1984
SBG	33.	2004/0061129	A1	Saxler et al.	04-01-2004
SBG	34.	2004/0029330	A1	Hussain et al.	02-12-2004
SBG	35.	2004/0021152	A1	Nguyen et al.	02-05-2004
SBG	36.	2003/0102482	A1	Saxler	06-05-2003
SBG	37.	2003/0020092	A1	Parikh et al.	01-31-2003
SBG	38.	2002/0167023	A1	Chavarkar et al.	11-14-2002
SBG	39.	2002/0066908	A1	Smith	06-06-2002
SBG	40.	2002/0017696	A1	Nakayama et al.	02-14-2002
SBG	41.	2001/0023964	A1	Wu et al.	09-27-2001
SBG	42.	2001/0020700	A1	Inoue et al.	09-13-2001
SBG	43.	2001/0015446	A1	Inoue et al.	08-23-2001

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Kind Code (if known)			
SBG	44.	PCT	WO 03/049193	A1	Cree, Inc.	06-12-2003	
SBG	45.	JP	2002016087	A	NEC Corp	01-18-2002	Abstract
SBG	46.	PCT	WO 01/57929	A1	Cree Lighting Company	08-09-2001	
SBG	47.	JP	10-050982		Nippon Telegraph & Telephone Corp.	02-20-1998	Abstract
SBG	48.	PCT	WO 93/23877	A1	Massachusetts Institute of Technology	11-25-1993	
SBG	49.	JP	2001230407	A	Matsushita Electric Industrial Co. Ltd.	08-24-2001	Abstract

Examiner Signature

Date Considered

12-8-05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/758,871	
			Filing Date	January 16, 2004	
			First Named Inventor	Sheppard	
			Group Art Unit	2811 2012	
			Examiner Name	Tom Thomas Geyer, J.	
Sheet	A2	of	A3	Attorney Docket Number	5308-291

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office	Number	Kind Code (if known)		
SBG	50.	EP	0 563 847	A2	Matsushita Electric Industrial Co., Ltd.	10-06-1993

OTHER NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				T
SBG	51.	Asbeck et al. "Piezoelectric charge densities in AlGaIn/GaN HFETs," <i>Electronics Letters</i> . Vol. 33, No. 14, pp. 1230-1231 (1997).				
SBG	52.	Breitschadel et al. "Minimization of Leakage Current of Recessed Gate AlGaIn/GaN HEMTs by Optimizing the Dry-Etching Process," <i>Journal of Electronic Materials</i> . Vol. 28, No. 12, pp. 1420-1423 (1999).				
SBG	53.	Burm et al. "Recessed Gate GaN MODFETS," <i>Solid-State Electronics</i> . Vol. 41, No. 2, pp. 247-250 (1997).				
SBG	54.	Chen et al. "Cl2 reactive ion etching for gate recessing of AlGaIn/GaN field-effect transistors," <i>J. Vac. Sci. Technol. B</i> . Vol. 17, No. 6, pp. 2755-58 (1999).				
SBG	55.	Eastman et al. "GaN materials for high power microwave amplifiers," <i>Mat. Res. Soc. Symp. Proc.</i> Vol. 512 (1998).				
SBG	56.	Eastman et al. "Undoped AlGaIn/GaN HEMTs for Microwave Power Amplification," <i>IEEE Transactions on Electron Devices</i> . Vol. 48, No. 3, pp. 479-85 (March 2001).				
SBG	57.	Egawa et al. "Recessed gate AlGaIn/GaN MODFET on Sapphire Grown by MOCVD," <i>Applied Physics Letters</i> . Vol. 76, No. 1, pp. 121-123 (January 2000).				
SBG	58.	Gaska et al. "High-Temperature Performance of AlGaIn/GaN HFET's on SiC Substrates," <i>IEEE Electron Device Letters</i> . Vol. 18, No. 1, pp. 492-494 (October 1997).				
SBG	59.	Gaska et al. "Electron Transport in AlGaIn/GaN Heterostructures Grown on 6H-SiC Substrates," <i>Applied Physics Letters</i> . Vol. 72, No. 6, pp. 707-709 (February 1998).				
SBG	60.	Gelmont et al. "Monte Carlo simulation of electron transport in gallium nitride," <i>Journal of Applied Physics</i> . Vol. 74, No. 3, pp. 1818-1821 (August 1993).				
SBG	61.	Heikman et al. "Polarization Effects in AlGaIn/GaN and GaN/AlGaIn/GaN heterostructures," <i>Journal of Applied Physics</i> . Vol. 93, No. 12, pp. 10114-10118 (June 2003).				
SBG	62.	Heikman et al., "Growth of Fe-Doped Semi-insulating GaN by Metalorganic Chemical Vapor Deposition," <i>Applied Physics Letters</i> . Vol. 83, No. 1, pp. 439-441 (July 2002).				
SBG	63.	Heikman, Sten J., <i>MOCVD Growth Technologies for Applications in AlGaIn/GaN High Electron Mobility Transistors</i> , Dissertation, University of California—Santa Barbara, September 2002, 190 pages.				
SBG	64.	Karmalkar et al. "Enhancement of Breakdown Voltage in AlGaIn/GaN High Electron Mobility Transistors Using a Field Plate," <i>IEEE Transactions on Electron Devices</i> . Vol. 48, No. 8, pp. 1515-1521 (August 2001).				
SBG	65.	Karmalkar et al. "RESURF AlGaIn/GaN HEMT for High Voltage Power Switching," <i>IEEE Electron Device Letters</i> . Vol. 22, No. 8, pp. 373-375 (August 2001).				
SBG	66.	Kuzmik et al. "Annealing of Schottky contacts deposited on dry etched AlGaIn/GaN," <i>Semiconductor Science and Technology</i> . Vol. 17, No. 11 (November 2002).				
	67.	Neuburger et al. "Design of GaN-based Field Effect Transistor Structures based on Doping-Screening of Polarization Fields," WA 1-5, 7th Wide-Bandgap III-Nitride Workshop (March 2002).				
SBG	68.	Ping et al. "DC and Microwave Performance of High-Current AlGaIn/GaN Heterostructure Field Effect Transistors Grown on p-Type SiC Substrates," <i>IEEE Electron Device Letters</i> . Vol. 19, No. 2, pp. 54-56 (February 1998).				
SBG	69.	Sheppard et al. "High Power Demonstration at 10 GHz with GaN/AlGaIn HEMT Hybrid Amplifiers." Presented at the 58 th DRC, Denver, CO, June 2000.				
SBG	70.	Sheppard et al. "Improved 10-GHz Operation of GaN/AlGaIn HEMTs on Silicon Carbide," <i>Materials Science Forum</i> . Vols. 338-342, pp. 1643-1646, (2000).				
SBG	71.	Sriram et al. "RF Performance of AlGaIn/GaN MODFET's on High Resistivity SiC Substrates," Presentation at Materials Research Society Fall Symposium, 1997.				
SBG	72.	Sriram et al. "SiC and GaN Wide Bandgap Microwave Power Transistors," <i>IEEE Samoff Symposium</i> , Pittsburgh, PA, March 18, 1998.				
SBG	73.	Sullivan et al. "High-Power 10-GHz Operation of AlGaIn HFET's on Insulating SiC," <i>IEEE Electron</i>				

Examiner Signature	<i>MS. H</i>	Date Considered	12-8-05
--------------------	--------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

